Spacecraft/Project HERSCHELL/SPIRE	Document Number	SPIRE-RAL-REP- 002861	Issue 1.0				
Sub System FCU	Date	20-Mar-07	Model PFM				
OUTGOING INSPECTION REPORT							
FROM		ТО					
Project Rutherford Appleton Laboratory Space Science and Technology Depar Chilton DIDCOT OXON OX11 0QX	tment	<b>EADS-F</b> Astrium GmbH. Projekt Herschel. Anlieferstelle: Halle 6052/Aloys Weber. Claude-Dornier- Strasse. D-88090 Immenstaad. Germany					
Applicable sections	<del></del>	Drawings / Docume	ents Attached				
Containers	Yes	Photos					
External Visual Inspection	Yes	1 110100					
External Connector	Yes						
Documentation	Yes						
Verification of Interfacess	No						
Extra Comments Sheets	Yes						
INSPECTION CONDUCTED BY		WITNESS	ву				
NAME DA	TE	NAME	DATE				
Dion Dawson (PA) 20/03	/2007	Jan Rautakoski	20/03/2007				

Spacecraft/Project	HERSCHELL/SF	'IRE	Document Number	SPIRE-RAL-REP- 002861	Issue	1.0
Sub System	FCU		Date	20-Mar-07	Model	PFM
			CONTAINER INSPE	CTION		
	<u></u>					
TRANSPORT O	CONTAINERS EXTERNA	AL CONDITION		REMARKS		Status
Mechanical damage to handling provisions	o container fasteners, l	ocks, clips or				Checked
nanding provisions						
Security / Locking Fi	ited					N/A
Markings for destinat	ion and description					Checked
Warning labels relatir	ng to handling lifting ar	d stacking limits				Checked
Any additional Comm	ents					
TRANSPORT (	CONTAINEDCINTEDN	L CONDITION	"	DEMARKS	"	Chatus
TRANSPORT	CONTAINERS INTERNA	L CONDITION		REMARKS		Status
Check Mounting fixtures fitted internal packaging						Checked
Internal padding / pac	kaging required					Checked
Mounting provisions			Secured to mounting			See Remarks
						See Remarks
						See Remarks
Any additional Comm						See Remarks
Any additional Comm				UITORS		See Remarks
Any additional Comm			ENVIROMENTAL MON	NITORS		See Remarks
Any additional Comm	nents	Humiditiy Monitors		Shock Sensors Trig		
Temp Mon	itors I		ENVIROMENTAL MO	Shock Sensors Tri 5g 10g	ggerd Information 15g 25g	50g
	itors I	Humiditiy Monitors	ENVIROMENTAL MON	Shock Sensors Trig		

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CHECK LIST	REMARKS	RESULTS
Contents against shipping list		Correct
All closure procedures		Correct
Instrument label		Correct
Note status of external		
contamination		
Degradation of paintwork or	O ma a min an a compatia la la minh a c	
Coating?	Some minor cosmetic blemishes	
Fasteners correctly locked?	large number of screws had no visable locking applied	See Remarks
Check protective covers are		
correctly labelled and fitted?		N/A
Double bagged?		Correct
Additional Comments		

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		INSPECTION OF ALL CO	DNNECTORS	
CHECK LIST		REMARKS (LIST CO	NNECTOR NUMBERS)	RESULTS
in Alignment				Pass
Damaged Sockets				None
nternal Debris				
Connector Covers fitted	The ESD cov	ers were removed for inspection	b and replaced	See remark
onnector Savers Fitted	Removed as	agreed at the DRB		See remark
EMC Covers Fitted	N/A			N/A
ED Tag Item / Green Tag Iter	ns fitted			N/A
Additional Comments	J39 and J40,	missing - see extra comment sh	eets	See remark

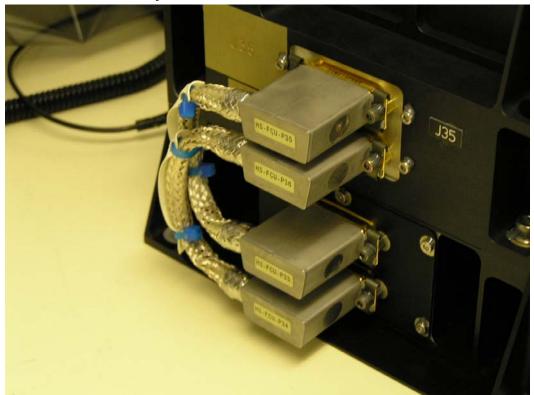
(r					1	F	
Spacecraft/Project	HERSCHELL/SPIRE		Document Number	SPIRE-RAL-	-REP- 002861	Щ	Issue 1.0
Sub System	FCU		Date	20-M	lar-07	[i	Model PFM
					<u>.</u>	_	
			DOCUMENTATION (	CHECK LIST			
	<u>,                                    </u>						
Chec	k		REM	ARKS			RESULTS
End Item Data Pack	Pov	iewed at DRB					Yes
		iewed at DND					163
Transportaion Docume	nts						Yes
Packing un- Packing in	structions						Yes
Additional Comments							
			Verification of In	nterfaces			
	<u> </u>		Tormodion or m				
Machaniaal interference	imanaiana anasitiad in th	- into wfo an anniwa	l de come ente conte co m	and flatance of au	of a constant of f	iving balas	and averall
Mechanical interface: d dimensions should be me							
documentation, (EIDP).							
INSPECTION / TEST RE	PORT NUMBER To be	e preformed at ir	ntegration	CHE	CKED	No	
Electrical interfaces: ve	erifying the location and ty	pes of connector	s against interface conti	rol document is no	rmally carried as pa	art of mecha	anical verification,
confirm this has been do							
INSPECTION / TEST RE	PORT NUMBER To be	e preformed at ir	ntegration	CHE	CKED	No	

		_		
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<u> </u>				l
Sub System	FCU	Date	20-Mar-07	Model PFM
		EXTRA COMMEN	T SHEET	1
		EXTRA COMMEN	1 SHEET	
All connectors checked	d against ICD for Position, Size, Ty	ype, and orientation - correct, exce	pt for J39 and J40, which are missin	g.
J31, J32, J33 to J36 ar	nd J9 and J10 could not be checke	ed for orientation as they are alread	dy in use.	
One end - three screws Minor dust contaminati	s found without visible fixing component found on surfaces and rewmover.		be added (screws positioned just of dust found around foot of unit. Reco	

View to show connectors – (not removed since delivery)

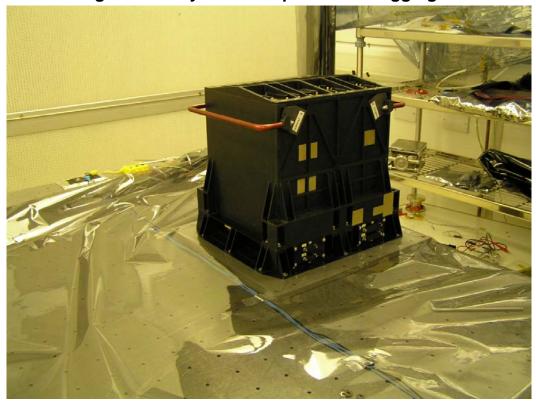


Connectors staked by manufacture

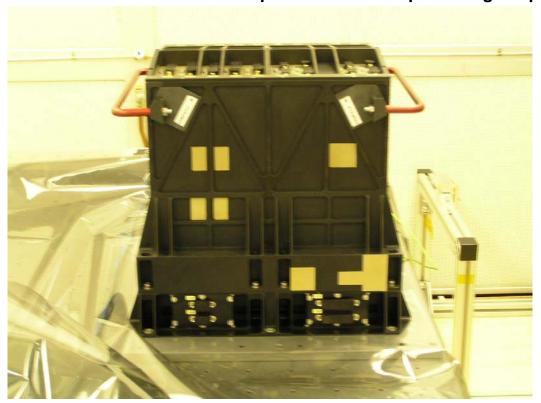


N.B. Other connector points were not photographed due to camera failure.

SPIRE-RAL-REP-002860 FCU OIR 20 March 2007 Unit waiting for first layer of ESD protective bagging



Side view of unit to show ESD protective covers protecting the pins



#### **End view of unit**



**Covers refitted after inspection** 



SPIRE-RAL-REP-002860 FCU OIR 20 March 2007

Double wrapped unit, secured to base



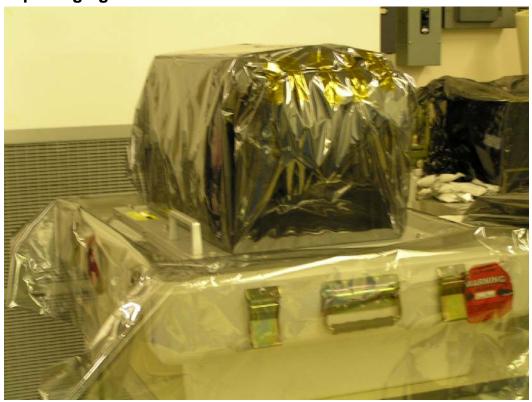
Transportation case with sealed shock absorbers.



Rough handling indicator on transportation outer case



# Final packaging of the unit



Final packaging of the unit



Unit is sealed to protect from dust



SPIRE-RAL-REP-002860 FCU OIR 20 March 2007

Humidity and temperature detection inside transportation case



Marking on exterior of case to show 'which way up' for transport





#### Unit secured inside the transportation case



# SPIRE-RAL-REP-002860 FCU OIR 20 March 2007 DCU and FCU units before lid are positioned



DCU and FCU fully packaged for dispatch

